Freeform Search

Database: US Pre-Grant Publication Full-Text Database; US Patents Full-Text Database; US OCR Full-Text Database; EPO Abstracts Database; JPO Abstracts Database; Derwent World Patents Index; IBM Technical Disclosure Bulletins

Term: L22 same l21

Display: 10 **Documents in Display Format:** - **Starting with Number** 1

Generate: ○ **Hit List** ◉ **Hit Count** ○ **Side by Side** ○ **Image**

Search | Clear | Interrupt

Search History

DATE: Friday, July 02, 2004 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ			
L23	L22 same l21	5	L23
L22	calcium or Ca ions	539304	L22
L21	L20 with l3 with l12	28	L21
L20	vascular permeab$	4309	L20
L19	l18 with l3 with l12	0	L19
L18	vascular pemeab$	0	L18
L17	L16 same l5	0	L17
L16	L15 with l12	1957	L16
L15	L14 or l13	24512	L15
L14	DNA transfe?	3697	L14
L13	gene transfe$	23037	L13
L12	enhanc$ or increas$	5711347	L12
L11	L10 same l5	1	L11
L10	ions	1583116	L10
L9	L8 with l5	1	L9
L8	L7 or l6	101539	L8

L7	lipid with conjugate	2939	L7
L6	PEG or conjugated lipid	99935	L6
L5	L4 with l3 with l2 with l1	1081	L5
L4	encapsula$	202396	L4
L3	dna or nucleic or plasmid or antisense or polynucleotide	256293	L3
L2	SPLP or liposom$ or lipid	122652	L2
L1	calcium or ca ion?	538269	L1

END OF SEARCH HISTORY

First Hit Previous Doc Next Doc Go to Doc#

Generate Collection Print

L23: Entry 2 of 5 File: PGPB Aug 1, 2002

DOCUMENT-IDENTIFIER: US 20020103156 A1
TITLE: Gene delivery compositions and methods

CLAIMS:

5. A method for expressing a gene product in cells of tissue of interest, comprising: treating the tissue with a vascular permeability agent under conditions of low calcium concentration to increase vascular permeability of exogenous nucleic acid; and administering exogenous nucleic acid to the tissue.

Previous Doc Next Doc Go to Doc#

L23: Entry 4 of 5 File: USPT Apr 23, 2002

US-PAT-NO: 6376471
DOCUMENT-IDENTIFIER: US 6376471 B1

TITLE: Gene delivery compositions and methods

DATE-ISSUED: April 23, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lawrence, III; John H.	Reisterstown	MD		
Donahue; J. Kevin	Baltimore	MD		

US-CL-CURRENT: 514/44; 424/93.2, 435/320.1, 435/455

CLAIMS:

What is claimed is:

1. A method for delivering nucleic acid to cells in tissue of interest, comprising:

administering to the cells a permeability agent to increase vascular permeability of the cells to an exogenous nucleic acid;

administering the exogenous nucleic acid to the cells under an effective amount of low calcium ion concentrations of about 500 .mu.mol/L or less; whereby the delivery of the nucleic acid to the cells is enhanced.

2. The method of claim 1 wherein the nucleic acid is administered to the cells under calcium ion concentrations of about 40 .mu.mol/L to about 500 .mu.mol/L.

3. The method of claim 1 wherein the nucleic acid is administered by perfusion.

4. The method of claim 3 wherein a perfusate of nucleic acid is recirculated and then readministered to the cells.

5. The method of claim 1 wherein the permeability agent is serotonin, bradykinin, platelet-activating factor, prostaglandin E.sub.1, histamine, vascular endothelium growth factor, zona occludens toxin, interleukin-2, plasma kinins, L-N-monomethyl arginine or L-N-nitro-arginine methyl ester.

6. The method of claim 1 wherein the permeability agent exhibits at least about 5% of the permeability activity of bradykinin in a standard permeability assay.

7. The method of claim 1 wherein the permeability agent is perfused through

vasculature of the tissue prior to administration of the nucleic acid.

8. The method of claim 1 wherein said low calcium ion concentrations are provided by perfusing through vasculature of the tissue a fluid having a calcium ion concentration of from about 40 .mu.mol/L to about 500 .mu.mol/L.

9. The method of claim 1 wherein the nucleic acid is administered to a solid cell mass.

10. The method of claim 1 wherein the nucleic acid is administered to a solid organ.

11. The method of claim 1 wherein the nucleic acid is administered to the cells of heart, lung, kidney, testes, ovaries, skeletal muscle, kidneys, brain or spleen.

12. The method of claim 1 wherein the tissue is cardiac tissue.

13. The method of claim 1 wherein the tissue is liver tissue.

14. The method of claim 1 wherein the tissue comprises malignant cells.

15. The method of claim 1 wherein the nucleic acid is administered to a solid tumor.

16. The method of claim 1 wherein the tissue is mammalian.

17. The method of claim 1 wherein the nucleic acid is administered ex vivo.

18. The method of claim 1 wherein the nucleic acid is administered in vivo.

19. The method of claim 1 wherein the nucleic acid is administered to a human.

20. The method of claim 1 wherein the nucleic acid is administered to livestock, poultry or dog or cat.

21. A method for delivering nucleic acid to malignant cells in targeted tissue, comprising:

administering to the cells a permeability agent to increase vascular permeability of the cells to an exogenous nucleic acid;

administering the exogenous nucleic acid to the cells under an effective amount of low calcium ion concentrations of about 500 .mu.mol/L or less; whereby the delivery of the nucleic acid to the cells is enhanced.

22. The method of claim 21 wherein the nucleic acid is administered to the cells under calcium ion concentrations of about 40 .mu.mol/L to about 500 .mu.mol/L.

23. The method of claim 21 wherein the nucleic acid is administered by perfusion.

24. The method of claim 23 wherein a perfusate of nucleic acid is recirculated and then readministered to the cells.

25. The method of claim 21 wherein the permeability agent is serotonin, bradykinin, platelet-activating factor, prostaglandin E.sub.1, histamine, vascular endothelium growth factor, zona occludens toxin, interleukin-2, plasma kinins, L-N-monomethyl arginine or L-N-nitro-arginine methyl ester.

26. The method of calim 21 wherein the permeability agent exhibits at least about 5% of the permeability activity of bradykinin in a standard permeability assay.

27. The method of claim 21 wherein the permeability agent is perfused through vasculature of the tissue prior to administration of the nucleic acid.

28. The method of claim 21 wherein a fluid is perfused through vasculature of the tissue by a fluid having a calcium ion concentration of from about 40 .mu.mol/L to about 500 .mu.mol/L.

29. The method of claim 21 wherein said targeted tissue comprises a solid tumor comprising the malignant cells.

30. The method of claim 21 wherein the malignant cells are present in a lung, liver, prostrate, brain, testes or ovaries of a subject.

31. The method of claim 21 wherein the nucleic acid is administered to a human.

32. A method for delivering nucleic acid to cells in tissue of intrest, comprising:

administering to the cells i) a permeability agent to increase vascular permeability of the cells to an exogenous nucleic acid, and ii) the exogenous nucleic acid under an effective amount of low calcium ion concentrations of about 500 .mu.mol/L or less, whereby the delivery of the nucleic acid to the cells is enhanced.

33. The method of claim 32 wherein the nucleic acid is administered to the cells under calcium ion concentrations of about 40 .mu.mol/L to about 500 .mu.mol/L.

34. The method of claim 32 wherein the nucleic acid is administered by perfusion.

35. The method of claim 34 wherein the perfusate of nucleic acid is recirculated and then readministered to the cells.

36. The method of claim 32 wherein the permeabiltiy agent is serotonin, bradykinin, platelet-activating factor, prostaglandin E.sub.1, histamine, vascular endothelium growth factor, zona occludens toxin, interleukin-2, plasma kinins, L-N-monomethyl arginine or L-N-nitro-arginine methyl ester.

37. The method of claim 32 wherein the permeability agent exhibits at least about 5% of the permeability activity of bradykinin in a standard permeability assay.

38. The method of claim 32 wherein the permeability agent is perfused through vasculature of the tissue prior to administration of the nucleic acid.

39. The method of claim 32 wherein low calcium ion concentration conditions are provided by perfusing through vasculature of the tissue a fluid having a calcium ion concentration of from about 40 .mu.mol/L to about 500 .mu.mol/L.

40. A nucleic acid enhanced delivery kit comprising:

a permeability agent that increases vascular permeability of a subject; a nucleic acid for administration to a subject; and a solution having an effective amount of a calcium ion concentration that enhances the delivery of the nycleic acid to the subject, wherein said concentration is about 500 .mu.mol/L or less.

41. The kit of claim 40 further comprising a device for delivery of the nucleic acid.

42. The kit of claim 40 wherein the delivery device is a catheter.

43. The kit of claim 40 wherein the nucleic acid is present in the kit as a viral vector.

44. The kit of claim 40 wherein the solution has a calcium ion concentration of about 40 .mu.mol/L to about 500 .mu.mol/L.

45. A treatment solution comprising:

a permeability agent that increases vascular permeability of cells to an exogenous nucleic acid; a nucleic acid; and a solution having an effective amount of a calcium ion concentration that enhances the delivery of the nucleic acid to the cells, wherein said concentration is about 500 .mu.mol/L or less.

46. The solution of claim 45 wherein the solution is pharmaceutically acceptable.

47. The solution of claim 45 wherein the solution comprises one or more therapeutic agents in addition to the nucleic acid.

48. The solution of claim 45 wherein the solution comprises one or more vascular permeability agents.

49. The solution of claim 45 wherein the permeability agent is serotonin, bradykinin, platelet-activating factor, prostaglandin E.sub.1, histamine, vascular endothelium growth factor, zona occludens toxin, interleukin-2, plasma kinins, L-N-monomethyl arginine or L-N-nitro-arginine methyl ester.

50. The solution of claim 45 wherein the solution has a calcium ion concentration of about 40 .mu.mol/L to about 500 .mu.mol/L.

Previous Doc Next Doc Go to Doc#